

scarcely find a proper place for review in this periodical. Besides, it should appear that even if one man did write of all these matters, one reviewer could not be expected to treat all of them in other than the perfunctory way in which almost all offerings of scientific work are "reviewed" in the daily or weekly press.

E. B. WILSON.

Algebraic Equations. By G. B. MATHEWS, M.A., F.R.S.,
Fellow of St. John's College. Cambridge University Press,
1907. 64 pp.

THIS is one of a half dozen "Cambridge Tracts in Mathematics and Mathematical Physics," issued by the Cambridge University Press. In this tract the author is confronted with the problem of giving an exposition of the Galois theory of equations within the compass of about sixty pages. This limitation makes it necessary for him to present the subject more or less in outline and to confine himself to a very few illustrative examples. An outline presentation, prepared by an eminent author, is certain to bring out in bold relief interesting view points. Such is the case in this booklet. And yet we are of the opinion that the real value of this book to beginners would have been enhanced by more abundant illustration and a somewhat fuller detail of explanation.

To save space, the author does not put down a definition in a sentence by itself; the definition is to be inferred from a condensed statement made as part of a sentence occurring perhaps in the body of a demonstration. Thus, the definition of an intransitive group (page 14) is given in course of a proof, as follows: "First suppose G is intransitive: this means that a certain number of roots x_1, x_2, \dots, x_r ($r < n$) are only interchanged among themselves by the substitutions of G ." Less easily comprehended are the definitions of simple groups and self-conjugate factor groups, similarly interpolated on pages 16 and 17. Despite the effort to secure extreme condensation, there occur redundancies, such as "absolutely undetermined" (page 2), "absolutely unaltered" (page 57), "perfectly definite" (page 6). These are less objectionable in oral exposition than in a printed outline.

Here and there are evidences of hasty composition. Thus, the tract is encumbered with some heterogeneous terminology. The author speaks in different places of the "arithmetically